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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,096	01/18/2002	Melchior Tripoli III	STB-3.2.005/4271	1835
26345	7590	07/25/2005	EXAMINER	
GIBBONS, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE 1 RIVERFRONT PLAZA NEWARK, NJ 07102-5497			MICHALSKI, JUSTIN I	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/053,096

Applicant(s)

TRIPOLI, MELCHIORE

Examiner

Justin Michalski

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-20 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 8, 9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al. ("Park") (US Patent 5,309,519).

Regarding Claim 1, Park discloses a sound module attachable to an object, the sound module comprising: a piezo amplification device having a top and a bottom and an interior (Fig. 12, 1120); a piezoelectric element coupled to the piezo amplification device substantially at the top of the piezo amplification device (1132); said piezo amplification device being attachable to the object (1110) at the bottom of the piezo amplification device; wherein when the piezo amplification device is attached to the object, the interior of the piezo amplification device and the object form a cavity (cavity between 1120 and 1110).

Regarding Claim 2, Park further discloses, an electrical circuit (Fig. 11, 1140) electrically coupled (cable 1142) to the piezoelectric element (1130) ; the electrical circuit being configured to generate audio signals (Col.7, lines 43-45); and, the piezoelectric element being configured to convert the audio signals into sound that resonates within the object (transducer 1110).

Regarding Claim 8, Park further discloses the piezo amplification device comprises semi-ridged foam (Col. 7, lines 33-39)

Regarding Claim 9, Park further discloses the piezo amplification device has at least one hole therein (1116).

Regarding Claim 11, Park discloses a sound module (Fig. 12) attachable to an object, the sound module comprising: a piezoelectric element (1132); piezo amplification means (1120) for housing the piezoelectric element and for attaching the piezoelectric element to the object (1110); and, circuit means (Fig. 11, circuit 1140) electrically coupled (1142) to the piezoelectric element for generating audio signal; wherein the piezoelectric element is configured to convert the audio signals (Col.7, lines 43-45) generated by the circuit means into sound that resonates within the object (1110).

Regarding Claim 12, Park discloses a method of producing sound comprising: housing a piezoelectric element (Fig. 12, 1132) at substantially the top of a piezo amplification means (1120); electrically coupling a circuit (Fig. 11, 1140) designed to produce audio signals to the piezoelectric element; coupling the piezo amplification means to an object to form a cavity (cavity between 1120 and 1110) between the piezoelectric amplification means and the object.

Regarding Claim 13, Park further discloses attaching a tail (1142) to the piezo amplification means; and housing the circuit (1140) on the tail.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park as applied to claim 1. Park does not disclose the object comprises an inflatable object. However, Park discloses that the sound output is generally 6-10 dB greater when mounted on MYLAR® (Col. 3, lines 5-10). It is well known that MYLAR® is commonly used as a material for inflatable balloons. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the piezoelectric device to an inflatable balloon made of MYLAR® to increase the sound output by 6-10dB as disclosed by Park.

***Allowable Subject Matter***

5. Claims 14-20 allowed.

6. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Takahata et al. (US Patent 4,641,054) discloses piezoelectric transducer with cavity.


Burdisso et al. (US Patent 5,515,444) discloses piezoelectric transducer with cavity.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM  
  
July 18, 2005

  
VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600